<b>APPLICATIO</b>	N COVER SHEET	FOR SUSPE	NDED CULTURE	[ ]		on F f
Name:	Chucky Wallace /db	oa Petite Man	an Seafood		G E I	V E
Address:	852 US Route 1	<u>-</u> .			JUN - 1	2006
City:	Steuben	-			NE DEPT OF MARI	NE RESOURCES
County:	Washington			Production of the Contract of	z	00THRAY HARBOR,
State, zip	Maine, 04680					
Telephone:	business (207) 546	-2272	home (207) 546-2272	2cell		
Email address:						
Date of Pre-app	lication meeting:	Decembe	er 2006			
Date of Scoping	g Session:	January 2	2006			
	tow	<u>n</u>	county	waterbo	<u>dy</u>	
Location of leas	se site: Ster	uben	Washington	Pinkham Bay St	ream	***
Additional desc (e.g. south of B						
Total acreage re (100-acre maxis		57 acres	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			<del></del>
Lease Term req (10-year maxim	uested: ten num)	years			15/2 X	
Name of specie	s to be cultivated, con	mmon and sc	ientific names:			
Eastern	oysters (Crassostrea	a virginica)				···
		· <del></del> · · · · · · · · · · · · · · · · · ·				
Name, address	and phone number of	f the source of	f seed stock, juveniles,	smolts, etc., to be	cultivated:	
Pemaq	uid Oyster Co., Inc., I	Muscongus B	ay Aquaculture, Sandy	Cove Hatchery		· ·
\$1,000 applicat	ion fee enclosed:				,	<del></del>
			application is true and rules governing aquact		have read a	ınd

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

# APPLICATION FOR A SUSPENDED AND BOTTOM AQUACULTURE LEASE Pinkham Bay Stream Site

#### 1. SITE LOCATION

#### a. Vicinity Map

The proposed experimental lease is located in the upper reaches of Pinkham Stream north of Pinkham Bay in northern Dyer Bay, town of Steuben, Washington county, Maine (Figures 1-4). The proposed site incorporates and expands upon the existing experimental lease held by the applicant.

#### b. Plan View

Total acreage requested is 2.157 acres in two tracts.

tract 1: 2.100 acres (80' x 1143' rectangle equivalent) for bottom culture without structures.

tract 2: 0.057 acres (25' x 100' rectangle) for nursery culture with structures.

Tract 1 is oriented in a N/S direction with the following boundaries: Points A-H are the corners of the lease starting at the southwestern most corner (point A) and proceeding clockwise to points B-H. Tract 2 is oriented in a N/S direction with the following boundaries: Points A-D are the corners of the lease starting at the southwestern most corner (point A) and proceeding clockwise to points B-D. The actual coordinates were determined using a WAAS DGPS (Wide Area Augmentation System Differential Global Positioning System receiver) (WGS-84 datum). Distance to shore was determined by scaling geographic coordinates using the MapTech Offshore Navigator mapping software package, WGS-84 datum). See Figures 2 - 5.

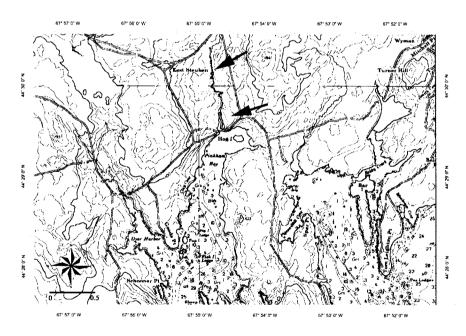


Figure 1. General chart (NOAA 13324) of proposed lease in Pinkham Bay Stream, town Steuben, Washington county, Maine as indicated by the bold arrows. Scale bar indicates 0.5 nautical miles. Compass rose indicates true north. The lower arrow denotes the location of tract 1 (bottom, no structures) and the upper arrow indicates the location of tract 2 (structures).

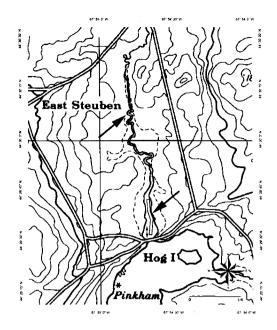


Figure 2. NOAA chart (No. 13324) indicating the proposed lease sites (rectangular areas) in Pinkham Bay Stream, town Steuben, Washington county, Maine. Scale bar indicates 0.25 nautical miles. Compass rose indicates true north. Tidal flow is indicated.

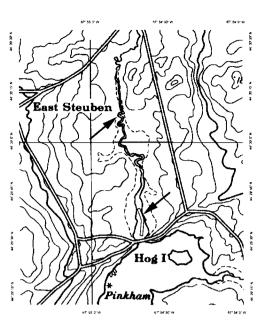


Figure 2a. NOAA chart (No. 13324) indicating the existing experimental lease sites (rectangular areas) in Pinkham Bay Stream, town Steuben, Washington county, Maine.



Figure 3. USGS topographic map (Petit Manan Point and Cherryfield, Maine quadrangles) indicating the proposed lease sites (rectangular areas) in Pinkham Bay Stream, town Steuben, Washington county, Maine.

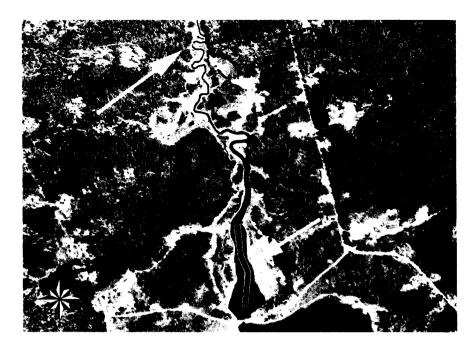


Figure 4. Aerial photo of the Pinkham Bay Stream vicinity depicting the proposed experimental lease site (rectangular areas) as denoted by the white arrows.

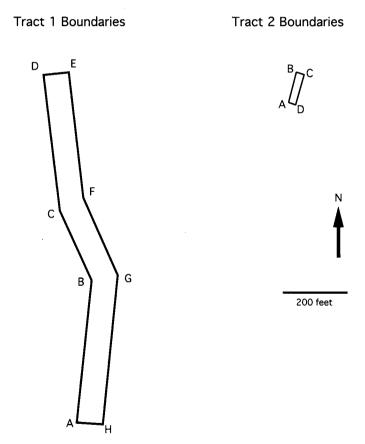


Figure 5. Boundary map of the proposed lease site. Letters at each corner refer to boundary description in Section 2.b.7 and 2.b.8. Scale bar indicates 200 feet. North arrow indicates true north.

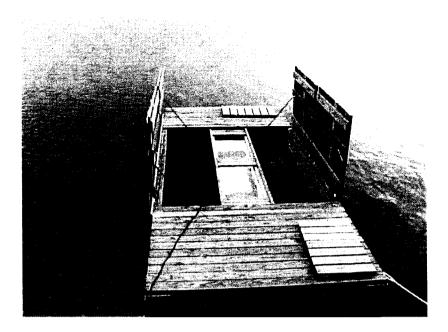


Figure 6-A. Photo of the upweller.



Figure 6-B. Photo of typical nursery tray configuration.

#### b.1. See Figures 1-5

- b.2. See Figures 2, 3 (NOAA and USGS chart) indicating depth contours and high and low water marks on the adjacent land. Note that the stream is impounded by the road passing between the stream and Pinkham Bay.
- b.3. The approximate maximum current velocity is 50 cm sec<sup>-1</sup> and the mean current velocity is 25 cm sec<sup>-1</sup>. The tidally driven current generally run in a N-S direction as indicated in Figure 2.
- b.4. See Figures.

#### b.5. See Figures.

b.6a. See Figure 2a for the existing experimental aquaculture lease. Tract 1 encompasses the southern portion of the experimental lease plus an extension to the north. Tract 2 is indentical to the experimental lease. No federal projects or structures or lie within 2000'. No state or federal beaches, parks or docking facilities lie within 1000 feet of the proposed sites.

b.7. Latitude and longitude coordinates of the boundaries DD MM.MMM (also see Figure 5).

The proposed experimental lease consists of two tracts. Tract 1 is a polygon oriented in a generally north/south direction. Tract 2 is a rectangle oriented in a north/south direction (see Figure 5).

#### <u>Tract 1 – bottom only</u>

Points A-H are the corners of the proposed lease starting at the southwest corner (point A) and proceeding clockwise to points B-H. The actual coordinates were determined by DGPS (WGS-84 datum). Distances to shore were determined by scaling geographic coordinates using the MapTech Offshore Navigator mapping software package, WGS-84 datum). Tract 1 occupies 2.10 acres. See Figures 2 - 5.

Geographic coordinates: DD MM.MMM

	Latitude north	Longitude west
Point A	44° 29.531'	67° 54.666'
Point B	44° 29.607'	67° 54.656'
Point C	44° 29.644'	67° 54.679'
Point D	44° 29.715'	67° 54.691'
Point E	44° 29.717'	67° 54.672'
Point F	44° 29.649'	67° 54.662'
Point G	44° 29.609'	67° 54.638'
Point H	44° 29.530'	67° 54.648'

Metes and bounds description:

leg	distance (feet)	bearing (°T)
Point A to B	462.3	005.3
Point B to C	245.1	336.4
Point C to D	433.6	353.3
Point D to E	80.0	082.2
Point E to F	410.8	173.6
Point F to G	268.2	157.1
Point G to H	481.2	185.2
Point H to A	80.0	275.7

#### <u>Tract 2 – structures only</u>

Points A-D are the corners of the proposed lease starting at the southwestern corner (point A) and proceeding clockwise to points B-D. The actual coordinates were determined by DGPS (WGS-84 datum). Distances to shore were determined by scaling geographic coordinates using the MapTech Offshore Navigator mapping software package, WGS-84 datum). Tract 2 occupies 0.057 acres and is identical to the existing experimental lease site. See Figures 2-5.

Geographic coordinates:

DD MM.MMM

	Latitude north	Longitude west
Point A	44° 30.126'	67° 54.814'
Point B	44° 30.142'	67° 54.808'
Point C	44° 30.140′	67° 54.803'
Point D	44° 30.125'	67° 54.809'

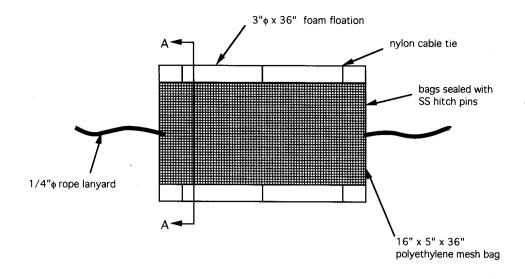
#### Metes and bounds description:

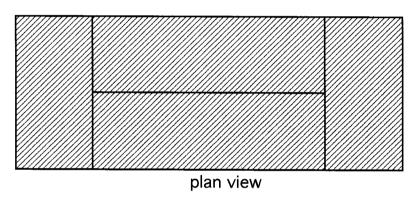
leg	distance (feet)	bearing (°T)
Point A to B	100.0	015.0
Point B to C	25.0	105.0
Point C to D	100.0	195.0
Point D to A	25.0	285.0

#### 2. SITE DEVELOPMENT

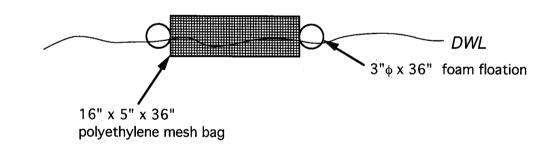
Structures to be located on the proposed lease (tract 2) include a 6' x 20' nursery upweller and possibly nursery growing trays and associated moorings and buoys to secure the floating gear (See Figures 6-A and 6-B). The nursery upweller will be constructed of wood and foam flotation and moored in the channel of the stream. The growing trays will be manufactured from ADPI OBC series polyethylene mesh bags, or something similar. A maximum of 2 arrays of trays (80 trays per array) are planned for the nursery tract for a total of 160 trays.

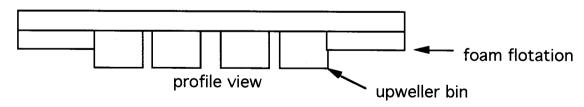
a. Single Structure Schematic – Top View of a floating nursery tray and 6'x20' upweller

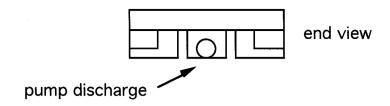




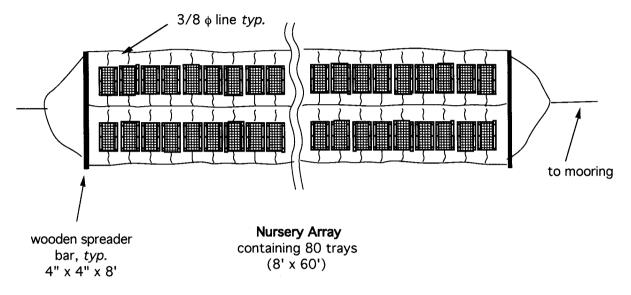
b. <u>Single Structure Schematic – Cross Section A-A of a floating nursery tray and profile & end view of the 6' x 20' upweller</u>



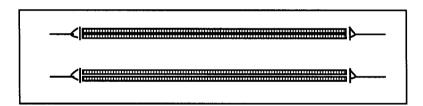




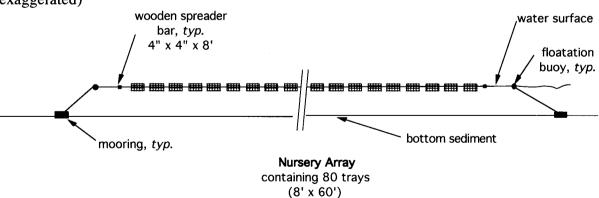
c. Maximum Structure Schematic – Top View (one of 2 arrays) or one upweller will be used.



c. <u>Maximum Structure Schematic – Top View (2 arrays in tract 2) or one upweller will used, not not both systems at once.</u>



d. <u>Maximum Structure Schematic - Cross Section (one of 12 arrays)</u> (note vertical scale is exaggerated)



e. On-Site Support Structures

- 1. None anticipated.
- 2. There are no plans for the storage of gasoline, oil or other hazardous materials on the proposed aquaculture lease.
- 3. There are no plans for a sanitary facility on the aquaculture lease site.

#### f. Mooring Plan – Cross Section for both floating trays and the upweller

The moorings securing the trays will consist of either 350 lb. concrete anchors or 10"  $\phi$  Helix<sup>®</sup> screw anchors. Figure 7 below diagrams the ground tackle comprising the mooring system. Ground tackle will consist of 8"  $\phi$  surface floats, 1/2"  $\phi$  mooring line, 3/8"  $\phi$  galvanized chain and appropriately sized shackles and swivels. Scope of mooring lines will be appropriate to the maximum depth at high water.

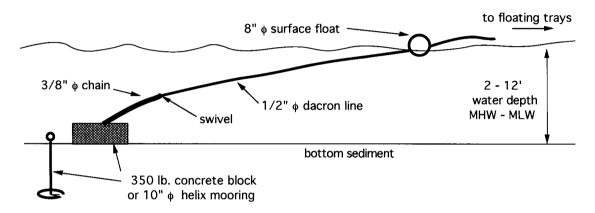


Figure 7. Mooring system diagram for both the nursery tray arrays and/or the floating upweller.

Mooring Plan – Cross Section See Figure 7.

#### Structure(s) and Mooring Array Schematic – Maximum Structure Array

The maximum area to be utilized by structures and moorings will be the entire 25' x 100' of the proposed lease tract 2.

#### g. Equipment Layout

See Figures Section 2c and 2d above.

#### h. Gear Color

The oyster trays are constructed of black polyethylene plastic and black foam floatation. The upweller is constructed of wood and black floatation chambers.

#### i. Marking

The applicant is aware of the DMR and USCG lease marking requirements and intends to mark the corners and boundary lines of the lease according to these requirements.

#### 3. OPERATIONS

#### a. Production Activities

- 1. The crop to be cultivated eastern oysters (Crassostrea virginica). Regular monitoring of the lease will occur. This project is to grow juvenile oysters in the upweller and/or nursery tray system until they are of a suitable size to bottom plant on Tract 1. One nursery upweller and/or up to 160 nursery trays would be used on tract 2. The general plan is to stock the upweller with seed oysters and rear them to a field planting size during the first growing season. Thereafter, oysters will generally be seeded in May or June of each year. Oyster seed will be purchased from a Maine shellfish hatchery such as Pemaguid Oyster Co., Inc., Sandy Cove Hatchery or Muscongus Bay Aquaculture in Maine. Once bottom planted, oysters will be left to grow for 2-3 years until harvest. Harvesting will occur by diving and/or towing a small drag. The applicant expects to visit the site 1-2 times per week to both monitor and operate the farm, depending on the time of year. This will consist of one transit per day. It is recognized that the area proposed for leasing is currently closed to the harvesting of shellfish due to high levels of fecal coliform (conversation with Bob Goodwin, DMR). The applicant plans to apply for a lease site in an area of Dyer Bay open to shellfish harvesting. This future site will be used to relay shellstock for depuration purposes (using a raft-based holding system), assuming the state and federal permits can be acquired.
- 2. Startup production will consist of the upweller currently being used on the tract 2 site. Maximum production of the oyster farm will be based on bottom planting up to 300,000 oysters per year, with a maximum stocking of 1,200,000 on bottom at any given time (13 oysters per square foot of leased bottom)
- 3. The upweller in use is a state of the art unit supplied by Coastal Aquaculture Supply of Rhode Island. The ADPI nursery bags are in use by much of the Maine oyster aquaculture industry (C. Davis, personal communication).
- 4. Currently, the farm is operated by its owner, Chucky Wallace. It is anticipated that no employees will be hired to operate the farm.

#### b. Noise and Light

The upweller unit is silent in operation and has no lights. The upweller will be in operation during late spring and summer of each year. Daily visits to the nursery site will be made from the nearby shore. The bottom lease site (tract 1) will have no lights. The operator operates a low horse power outboard to reach the growing sites. It is not anticipated that operations after daylight hours will be necessary unless dire circumstances should arise.

#### c. Upland Facilities or Holdings

There are currently no shoreside facilities associated with this planned aquaculture operation. Storage of unused gear will be on the applicant's property. Water access will be made from property owned by the applicant on Pinkham Bay stream.

#### d. <u>Current Operations</u>

The site is currently being used to cultivate oysters by the applicant. Oysters are reared in the floating upweller unit until they are suitable for bottom planting on tract 1.

#### 4. ENVIRONMENTAL CHARACTERIZATION

This site was selected for oyster cultivation for numerous reasons, including the local hydrography and biological productivity, current regime, water quality, lack of severe exposure during storms. The bottom characteristics are as follows:

<u>Tract 1</u>: Gravel and rocky bottom on the southern end of the tract 1. The northern end is composed of a sandy, silty mud substrate.

<u>Tract 2</u>: Silty bottom.

The approximate depths at low and high tides are:

<u>Tract 1</u>: The maximum water depth at the site is 11 feet at low tide and 17 feet at high tide. Minimum depths at the northern end of tract 1 is 4 feet. The tidal range above the Pinkham Bay Bridge is about 6 feet.

<u>Tract 2</u>: The maximum water depth at the site is 4 feet at low tide and 6 feet at high tide. The tidal range is about 2 feet.

The topography is as follows:

<u>Tract 1</u>: The bottom topography varies from flat at the northern end of the tract 1 and drops off to the deeper water at the southern end.

<u>Tract 2</u>: The bottom is flat.

The plants and animals (flora and fauna) by species or common names, and described as abundant, common, or rare.

<u>Tract 1</u>: Bay crabs (common), blue mussels (rare), variety of seaweeds and kelps (common).

<u>Tract 2</u>: marsh grass surround the area. The bottom has mud snails and sea fleas.

The approximate current speed and direction at the two sites are as follows:

<u>Tract 1</u>: The maximum current speed is less than 0.5 knots over the proposed tract 1. The velocity increases as it runs under the Pinkham Bay Bridge. This is a good current for growing oysters on bottom. The current direction runs in a north/south direction.

<u>Tract 2</u>: The tidal current runs less than .25 knots in a north/south direction. Current speed and direction were determined by timed observations of floating debris in the water pass a known distance.

The general shoreline and upland characteristics for tracts 1 and 2: The proposed tract 1 is surrounded by a marshy area. The upland is generally wooded.

#### 5. AREA RESOURCES

a. Shellfish Beds, Fish Migration Routes and Submerged Vegetation Beds

There are no known commercial shellfish beds, fish migration routes or submerged vegetation beds within the proposed aquaculture lease site.

#### b. Essential Habitats/Endangered Species

The proposed site does not lie within an essential habitat as defined by the MDIF&W.

#### 6. SURROUNDING AREA USE

#### a. Riparian Property

- 1. The proposed lease site is less than 1000 feet from shore (see Figures 2, 3 and 4). A copy of the Steuben tax map and list of riparian owners within 1000 feet is included as an attachment.
- 2. The proposed aquaculture activities will take place in the subtidal zone. The riparian owners within 1000' of the proposed lease site are included as an attachment.
- 3. Access will be made by the applicant's shore frontage.
- 4. There is no obvious riparian activity within the proposed lease sites other than that of the applicant.

#### b. Existing Uses

- 1. The proposed tracts lie within the center of Pinkham Bay Stream. The stream is only passable by a canoe or small skiff. During the summer months, approximately 1-2 vessels pass within 500 feet of this site per week. During the winter, vessel traffic is nonexistent as the stream freezes over.
- 2. The applicant requests rights to the surface waters for placement of gear for the cultivation of oysters in tract 2. Furthermore, the applicant requests rights to the bottom of tract 1 for cultivation of oysters. Other uses such as recreational fishing should have no impact on the aquaculture activities and should not be limited.
- 3. There are no known mooring owners, fishermen or draggers who actively use the proposed site.

#### c. <u>Point Source Discharge</u>

There are no point source discharges within 1000' for the proposed lease site.

#### 7. TECHNICAL CAPABILITY

Mr. Wallace has worked on the water in the commercial fisheries for the past 10 years. Furthermore, he has been operating an oyster farm at this site for the past three years. Mr. Wallace successfully completed the Maine Aquaculture Training Institute course in shellfish culture.

#### 8. FINANCIAL CAPABILITY

#### a. Financial Capability

The applicant is currently conducting an oyster culture operation on the. If this proposed lease is granted the applicant will continue to operate the oyster farm with expenses being paid by operating revenues and the applicants personal resources.

#### b. Costs Estimates

Following are estimated capitalization costs during the startup phase of the proposed operation: Payments will be made from operating revenues of the existing two rafts plus future income from the four new rafts.

Upweller (already owned)	8,000
Oyster ADPI bags	1,600
misc. gear (moorings)	1,000
boat (owned by applicant)	4,000
seed purchase (annual)	3,000
contingency	1,000
total	18,600

## c. Other Lease Interests and Multiple Ownership

Experimental lease on this site in the name of Chucky Wallace.

### d. Other Lease Interests and Multiple Ownership Continued

N/A

#### 9. OTHER REQUIREMENTS

#### a. <u>Performance Bond</u>

The applicant has read the MDMR Aquaculture Regulations chapter 2.40 and understands that upon issuance of a lease by the Maine DMR, he will be required to either open an escrow account or obtain a performance bond in the amount of \$5000. The applicant currently holds a performance bond and thus already meets this requirement.

#### b. <u>Local Approvals</u>

See the attached letter from the Stuben Harbormaster.

#### c. U. S. Coast Guard

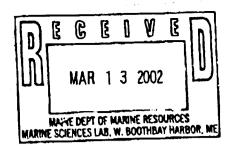
The applicant has read the regulations pursuant to Private Aids to Navigation and is aware that private aids to navigation may be required.

#### d. <u>Seed/Stock Source Confirmation</u>

Oyster seed will come from within the State of Maine from Muscongus Bay Aquaculture, Pemaquid Oyster Company or Sandy Cove Hatcheries. The applicant is aware of the state and federal laws pertaining to importation and transfers of oysters.

#### 10. ANTICIPATED EMPLOYMENT OPPORTUNITY

The initial number of employees will be 1 part-time worker during the seeding and harvest phase. As the business grows, it is anticipated that 1 full time employee will be required when the farm reaches maximum production. Between the harvest and seeding operations, the applicant will be the sole employee.



28 Goods Point Rd. Steuben, ME 04680 March 11, 2002

## Department of Marine Resources:

I am writing regarding a request by Charles Wallace of Steuben, Maine for an oyster farming lease on the upstream side of the Pinkham Bay Bridge located above the head of the Pinkham Bay arm of Dyer's Bay in Steuben.

There are no existing fisheries or moorings in the area of the proposed lease as he described it to me, and such an operation will not interfere with boat traffic. The only regular activities that take place in this area, to my knowledge, are recreational canoeing and migratory waterfowl hunting.

Sincerely,

Elwood L. Pinkham Harbor Master, Steuben

(207) 546-2649

cc: Charles Wallace

RECEIVED

JUL 1 1 2000

MAINE DEPT OF MARINE RESOURCES W BOOTHBAY HBR ME 04575

P.01

List of Land Country within 1,000 feet of Proposed Lease Donald West - Lot 23, Map 13, Let 37, maple
Address - PC. Box 303, Milbridge Me. C4658

Steven + Martha Resotko - lot 38, Map 10 Address - 106 Pinkham Bay Bridge Road, Steuben, Me. CY680

J. Crosby - Let 39, Mapic; Lot 56, Map 12; Lot 54, map 9
Address - PC. Bex 4037, Portland Me. Cylel

Vernon Pinkham-lot 24, Map 13 Me. Address-167 Pigeon Hill Road, Stewben & 4680

Mike Poce -let 46, Map 12 Address-50 Dyers Bay Road, Steuben, Me 04680

Dunelson Hoops - lot Ec, Map 12 Address - 160 Dyers Bay Road, Steuben, 04680

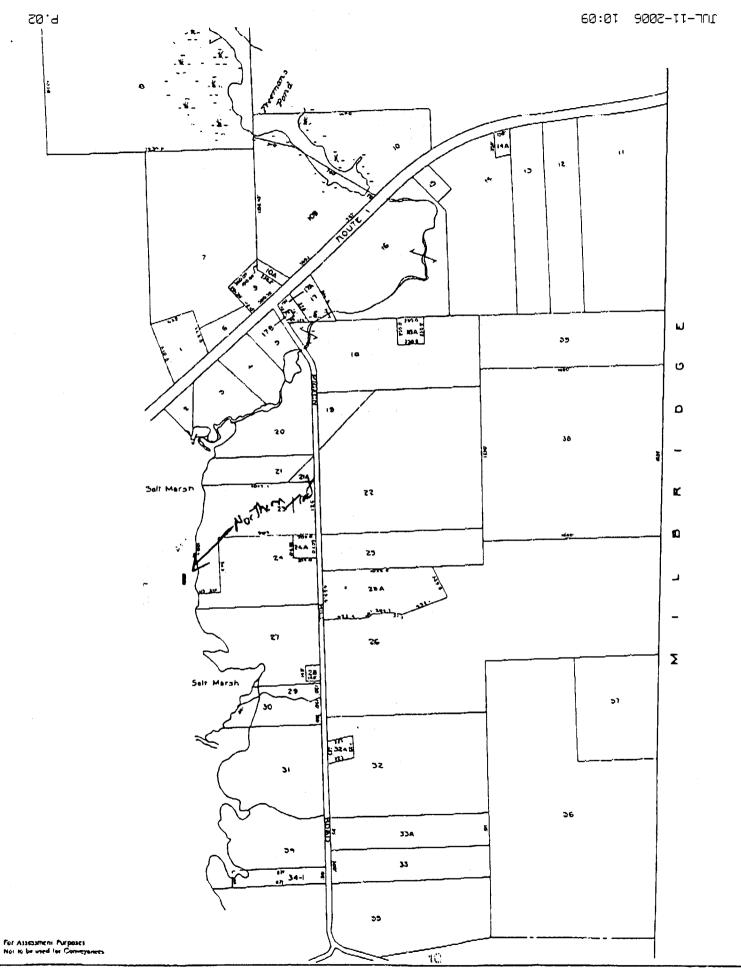
Timothy hiest - lot 64, Brap 12 Address - 66 Salty Marsh Road, Stenber, 176, 04650

Emil and Anne Giotta - Lot 56, Map 9

emil Giotta - 30 Gillespie St., Pine Bush, NY 12566

Anne Giotta - 271 Collignon Way, Apt. 3B, Rivervale, NJ 0767:

James West - Lot 64, Map 12 Spragues Falls Rd. Cherryfield, ME 04622



#### NOTICE OF EMERGENCY RULE REPEAL AND PROMULGATION

AGENCY: Department of Marine Resources

STATUTORY AUTHORITY: 12 M.R.S.A. §§ 6172, 6192, & 6193

**RULE REPEAL AND PROMULGATION:** DMR Regulation 95.09 GG, Closed Area No. 52-E, Pinkham Bay, Steuben, promulgated on November 26, 2001, is repealed and replaced with the following rule:

TEXT OF RULE: DMR Regulation 95.09 GG, Closed Area No. 52-E, Pinkham Bay, Steuben

Effective immediately, because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels taken from the shores, flats and waters of Pinkham Bay, inland (northerly) of a line beginning at the northern point of Clay Cove and running in a northeast direction to the western point of Hog Island, then due north to the nearest point on the mainland. This area is classified restricted and harvesting requires a special MDMR permit.

EFFECTIVE DATE: June 30, 2006

EFFECTIVE TIME 0930

AGENCY CONTACT PERSON:

Amy M. Fitzpatrick

Department of Marine Resources

194 McKown Point Road

W. Boothbay Harbor, Maine 04575

http://www.maine.gov/dmr/rm/public health/closures/closedarea.htm

BANGOR DAILY NEWS July 5, 2006

#### STATEMENT OF FACT AND POLICY

The Commissioner of the Maine Department of Marine Resources repeals emergency DMR Regulation 95.09 GG, Closed Area No. 52-E, Pinkham Bay, Steuben, promulgated on November 26, 2001, and replaces it with a new regulation. This new regulation reclassifies the northern Pinkham Bay area as restricted requiring a special MDMR permit for shellfish harvesting.

Department personnel have sampled and surveyed the flats and waters of northern Pinkham Bay and have determined that shellfish are subject to intermittent microbiological pollution and unrestricted harvesting would pose a risk to public health.

GEORGE D. LAPOINTE

COMMISSIONER



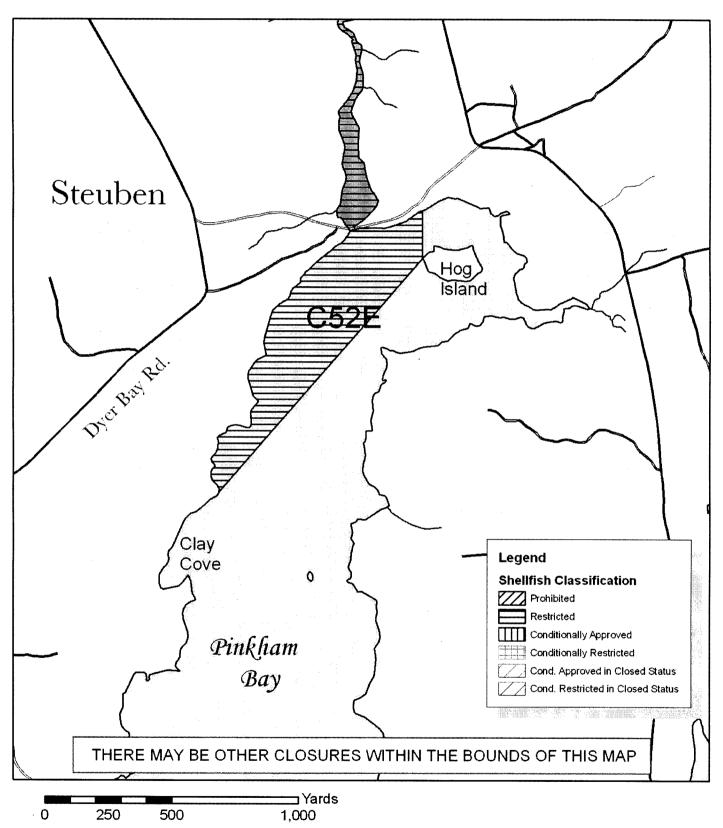
## **Maine Department of Marine Resources**

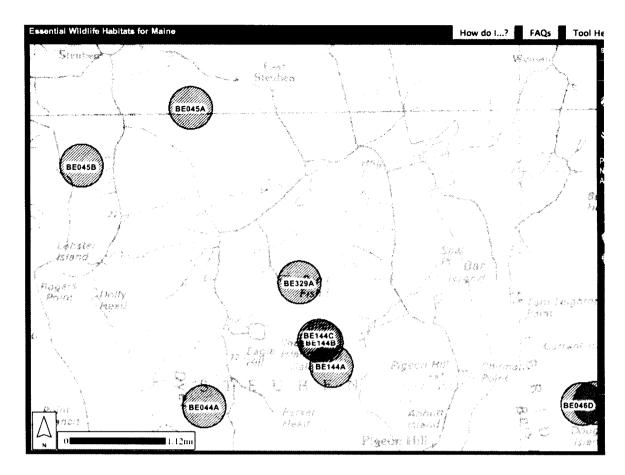
Legal Notice of Shellfish Closure Area



C52E - Pinkham Bay, Steuben.

6/30/06





Map of Essential Wildlife Habitat in the Pinkham Bay vicinity.